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California Postsecondary Education Commission

Public Higher Education Performance Accountability Framework Report: Goal - Contributions to Economic, Civic, and Social Development Measure: Policy Options

This item reviews what the Commission has learned about the alignment between degree production and California's demand for an educated workforce. It offers a series of options for state colleges and universities to increase enrollment and degree production. It also offers an option for policymakers to consider encouraging increased degree production in specific fields of high state priority but for which there are shortages of qualified workers.

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The Commission advises the Governor and the Legislature on higher education policy and fiscal issues. Its primary focus is to ensure that the State's educational resources are used effectively to provide Californians with postsecondary education opportunities. More information about the Commission is available at www.cpec.ca.gov.

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Introduction

The California Postsecondary Education Commission recently adopted three reports dealing with postsecondary education and the economy, as part of its Higher Education Performance and Accountability Framework. The reports examined three specific measures:

- Educational attainment of the population;
- Links between degree attainment and earnings; and
- Match between degrees awarded and labor market demand.¹

These papers were discussed by the Commission, its staff, and the Commission's Statutory Advisory Committee representing all the postsecondary education segments. The purpose of this paper is to suggest policy options worthy of further exploration based on previous papers and ensuing discussions.

What We Have Learned

A few key findings from the research clearly show the policy context confronting California:

- The educational attainment of California's population is growing more slowly than the national average, posing a significant threat to the State's long-term economic competitiveness.
- Younger people have lower levels of educational attainment than the retiring "Baby Boomers" they will replace.
- There is a disparity in educational attainment based on ethnicity. This disparity is felt most acutely by the growing population of Latinos in California.

- California relies on domestic and international migration to make up for a shortage of degree holders in the State's workforce, at the same time many immigrants arrive with less than a high school education.
- California's institutions of higher education lack the resources and capacity to supply enough college graduates to fill all the high-paying jobs that require a college degree the State's employers need. Employers are paying a premium to import the talent they need; while at the same time, a large portion of the State's population lacks the education to fill these jobs.
- Earning a degree provides a substantial increase in income. Compared to an average Californian with a high school level education, an associate degree increases income by 47%, a bachelor's degree by 108%, and a graduate or professional degree by 189%.
- College reduces income inequities based on gender. The income gap between men and women with associate degrees is about half that of men and women without high school diplomas.
- Higher education also has significant benefits for Latinos, African Americans and Asians. Census data show that bachelor's degree earners in these groups more than double their income levels compared to those with only a high school level education.
- English proficiency programs at community colleges and extension programs can significantly increase the incomes of even non-degree earners. On average, individuals with a high school level-education increased their earnings by 136% by becoming English proficient.
- California offers greater income rewards for earning a bachelor's degree compared to similar states such as New York, Washington, Massachusetts and Florida.
- College graduates are valued for their high level of general skills and their ability to learn and adapt quickly. A key contribution of higher education to meeting labor market demands is the continuing focus on the development of these general skills.
- Because most undergraduate degrees prepare students for many different types of jobs and employers often hire people of different backgrounds, higher education planning that attempts to match graduates of particular disciplines to predicted demand in specific occupations is futile, in most cases.
- In the few occupations with a clear link between a degree awarded and eligibility for employment in particular occupation (such as nurses, teachers and engineers) we find some shortages and surpluses, which in several cases policymakers have already recognized and addressed.

The overwhelming conclusion supported by all the available evidence is that California needs more college

Public Higher Education Accountability Framework

The public's investment in higher education should be measured by outcomes. As the California's independent higher education planning and coordinating body, the Commission is in a unique position to assess performance without bias or conflict of interest. Under State law, the Commission is the only public agency with the data needed to assess student success across the University of California, California State University and California Community College systems. The Commission uses these data, coupled with other relevant State and national higher education data, to compile the performance assessment presented here. The Commission has put a priority on improving public confidence in the administration and delivery of public postsecondary education by increasing public knowledge of student outcomes, transparency of higher education decision making, and efficient achievement of a well educated and prepared workforce and population.

graduates at all levels from associate degrees to Ph.D.s if it is going to sustain its competitive position in an increasingly global economy and create opportunities for its citizens in an emerging economy. The question confronting policymakers is: how to do it?

Policy Options

The Commission has determined there are three areas in which new policies would help address the shortage of college graduates and ensure an alignment between postsecondary education and the labor market.

The first area is increasing the number of Californians completing degrees. To achieve this goal, policymakers have three strategic options they can employ singularly or in combination: (1) Expand the number of campuses in the three public higher education segments; (2) Invest to increase the capacity of existing campuses to serve more students; and (3) Increase the productivity of the existing campuses, which means producing more graduates from the same number of enrollments.

The second area for consideration is a policy initiative that targets the large number of Californians who have some college education but who have not completed a degree. These workers will remain in the workforce for many years and increasing their skills and productivity offers substantial returns to both the state and the individual worker.

Finally, policymakers need better and more current data on how the system is performing in relation to labor market demand in order to adjust investments in higher education and track the impact of new policies over time.

The Commission presents here policy options it believes the Legislature could explore to increase the number of degrees awarded and improve the performance of public higher education in California.

Increase the Number of Californians Completing Degrees

Strategy 1: Expand the Number of Campuses

Expanding the number of campuses in any of the three public higher education segments is expensive and it takes a substantial period of time before new campuses achieve a level of enrollment and quality equal to existing ones. Many campuses begin as branches of existing campuses and slowly develop into freestanding colleges. The Commission has concluded that the state should continue to track population growth and identify geographic areas that may be underserved by existing campuses, and identify regions where existing campuses have reached the limits of expansion and where a new campus may be warranted. But the Commission sees this as a long-term strategy that needs to be approached with a great deal of deliberation.

Strategy 2: Increase the Capacity of Existing Campuses to Serve More Students

The current Compact between the higher education systems and the Governor essentially promise increased funding for increases in enrollments, along with annual cost-of-living adjustments. Assuming constant or improving graduation rates, this should lead to an increased number of graduates.

Individual campuses could increase capacity and maintain flexibility if they add facilities through joint use agreements with other higher education institutions, public school or private property owners. If enrollments were to decline, the campuses would not be left with unnecessary facilities to support.

Strategy 3: Increase the Productivity of Existing Systems

Earlier papers by the Commission have pointed out declining graduation rates, particularly in the community colleges and the CSU, and the extended time to degree of students have decreased the number of degrees awarded relative to enrollments. The Commission sees five initiatives that have potential for improving timely degree and certificate completion.

1. Explore methods for changing funding incentives away from rewarding achievement of enrollment goals and toward rewarding degree and certificate completion.

The Commission observes that higher education institutions, like most organizations, are driven by incentives, particularly financial ones. Thus, the Commission believes examining incentives created by current funding mechanisms and alternatives to these mechanisms is a worthy undertaking.

Across all sectors of public higher education, funding formulas encourage campuses to achieve but not exceed enrollment goals. Campuses and systems that exceed goals are not rewarded and those that fall short often have to return money. The Compact between the Governor and the systems tie funding growth to enrollment growth. However, campuses which produce relatively few graduates for the number of students enrolled are not penalized, while campuses that produce more graduates are not rewarded. This policy conundrum has caught the attention of policymakers around the nation. Recently the Western Interstate Commission for Higher Education has endorsed the idea of linking some part of higher education funding to “success attainment,” usually defined as degree or certificate completion.²

The Commission recommends exploring new funding mechanisms that tie some portion of increases in system and campus funding to increases in their number of graduates, or in the case of some community college students a certificate or logical sequence of vocational courses, as Florida and other states have done. This change seems particularly important in the community colleges and the CSU system where graduation rates have substantial room for improvement. One important caveat is that in setting graduation and certificate completion goals for individual campuses, it is important to make sure those goals are adjusted to reflect the demographics of students served so that campuses are not punished for serving more disadvantaged populations.

2. Reduce time-to-degree by improving articulation between the California Community Colleges, the California State University, and the University of California.

Reducing time-to-degree and improving the articulation of the UC and the CSU with the community colleges has been the focus of a number of policy initiatives. For example:

- The CSU “Lower Division Transfer Pattern” project defines a path for transferring students to most efficiently earn a bachelor’s degree.
- The CSU “Campus Actions to Facilitate Graduation Program” tracks graduation rates and encourages the sharing of best practices.
- The UC “streamlining initiative” identifies community college courses that can meet lower division requirements in various majors at different UC campuses and provides information on transfer pathways through the UC and the CSU.

The Commission notes that the CSU requested \$25 million in the 2006–07 budget cycle to support student services that help improve graduation rates, but was unsuccessful. The Commission is open to supporting such requests in the future that are tied to well-planned initiatives to improve graduation rates and that reduce the time to degree of students.

The Commission recognizes that the transfer issue is complex, and it has addressed the issue several times in the past.³ The Commission recognizes that transfer applications at many UC and CSU campuses have decreased, and believes that the WICHE-recommended change in funding formula could add energy and purpose to transfer initiatives.

3. Tailor special programs for older and returning students to reduce time-to-degree.

Public higher education in California, particularly the community colleges and the CSU, serves many older students. For example, more than 8% of CSU students are over the age of 30. There is also a large population of California workers who have completed some college but have not yet earned a degree. Research suggests that cohort-based programs that allow these older students to methodically move through a program together lead to higher graduation rates and improved student satisfaction. Such programs are found in all three segments of public higher education. One of the largest programs involving many community colleges and CSU campuses is the Program of Accelerated College Education (PACE). PACE allows students to move seamlessly between community colleges and CSU campuses. Students enroll in a carefully planned series of courses on an accelerated schedule. PACE is an example of a program with a track record of success that could be quickly ramped up to serve even more students. Similarly, a number of campuses offer degree completion programs on a self-support basis through their extension operations.

The Commission encourages all three public segments to make addressing the education and training needs of older students a major strategic initiative. The Commission encourages each segment to develop a system-wide strategy for expanding and marketing these programs to reach more Californians who could benefit from completing degrees. The Commission would support special funding for this effort once a comprehensive strategy is developed.

4. Fully fund year-round operations at high-demand campuses.

Most CSU and UC campuses are officially year-round operations but, in fact, summer sessions have limited offerings due to limited budgets. Summer session faculty are teaching on an overload basis, and students are free to opt in or out. With marginal additional funding, high-demand campuses could move to real year-round operations. This would entail expanding faculties so that faculty members could teach any two trimesters in a year. Students could be required to attend at least one summer trimester during their academic career. This policy could produce a significant increase in the capacity of the systems, substantially reduce average time-to-degree, and allow more students to attend their campus of choice. The Commission supports fully funding such an expansion.

If full funding is not available, this change could be supported in part by taking low-demand campuses off year-round schedules and moving those resources to high-demand campuses. Lower-demand campuses could continue the traditional self-supported summer program run through extended learning units. While this could lead to a net increase in enrollments, the increase would likely be less than maintaining all campuses on year-round schedules. It may also provide a financial disincentive to students residing in the service area of low-demand campuses to enroll in summer sessions.

5. Provide differentiated funding for higher-cost, high-demand fields.

Current funding strategies fund all enrollments equally. This may discourage campuses from expanding higher-cost programs that need specialized facilities and technology, or higher-cost faculty, even if there is substantial labor market demand. The Commission notes that its analysis of the match between degrees awarded and labor market demand in specific occupations found few dramatic mismatches. When serious shortfalls have been found, such as in the nursing and teaching occupations, the Legislature has made special provisions to encourage campuses to expand those pro-

grams. For example, in the 2007–08 state budget the Legislature appropriated \$21 million to support nursing programs primarily in the community colleges and to a lesser degree in the CSU.

The Commission recognizes the difficult choices public colleges and universities must make between accommodating increases in enrollment and increases in particularly high-cost, high labor market demand programs. The Commission will continue to monitor labor market trends and will contribute to identifying labor market bottlenecks such as the supply of nurses and teachers which may be targets for special funding initiatives.

Invest in upgrading the education of existing workers particularly those in the ethnic and age groups with lower attainment.

Most of the people who will make up the California workforce 10 years from now are already in the workforce. In the existing workforce are a large number of Californians who have some college education or an associate degree. The available data also indicate that in the younger age groups, Latinos, and African Americans have earned fewer degrees than their counterparts. Given these trends, it makes sense for the state to make a special effort to encourage existing workers to upgrade their education and complete degrees. This would increase the quality of the existing workforce and mitigate inequality among these groups. These workers could become qualified for the jobs for which the State now imports workers. The Commission sees several policy approaches to accomplish this goal that deserve exploration:

- First, the State and the higher education segments should develop a campaign to work with various industry and union groups to encourage employers to support their employees to complete degrees. Policies that provide tuition and fee subsidies or time off to attend class could be encouraged. Larger employers could “host” degree completion programs on their worksites, by providing classroom space. The benefits of established workers completing degrees accrue to the individual, who will get increased earnings, the employer, which gets a more skilled employee, and the state, which gets a more educated workforce. Thus, it makes sense for each party to contribute something.
- Second, the Commission recommends that the Legislature fund a program to identify model self-support degree completion programs in UC and CSU extension programs that cater to the large population of incumbent workers with “some college” or associate degrees, and to disseminate these best practices. In addition, the Legislature should fund a similar program in community colleges to identify model programs to allow employed people with some college to complete an associate degree.
- Third, the large number of California workers who have attained some postsecondary education but have limited English proficiency could be a target for other postsecondary programs. These workers may have good technical skills but their success is limited by a lack of fluency in English. Community colleges, CSU and UC extension programs offer a wide range of English as a Second Language (ESL) programs, but the need is huge and there is not a coordinated strategy to meet it. ESL programs that focus on English for the workplace or for particular occupations, such as health care or manufacturing, would be particularly valuable. Employers with large numbers of such employees could support these programs by providing instructional facilities in the workplace or by contracting with community colleges and/or universities to provide customized vocational ESL instruction. It seems reasonable that costs for these programs be shared jointly by employers, the state and the individual. Community colleges, UC and CSU extension programs seem to be natural entities to deliver such programming. The Commission recommends the Legislature fund an initiative in this area to identify and disseminate best practices throughout the system and promote employer and union support for such programs.

Track graduates and leavers of public education into the labor market

Managing California's higher education without knowing what becomes of its graduates and leavers handicaps effective policy development and evaluation. Without a systematic way of tracking the experience of graduates, policymakers must rely on sporadic studies of small groups and anecdotal stories to assess the success of policy. Several states have addressed this problem by establishing data systems that use unemployment insurance and other administrative records to monitor the employment and earnings of all graduates. These data systems routinely provide information on whether a graduate is employed and in which industry, how much they earn, and whether they remained in the state. These systems produce valuable data for policy development and for assessing performance at the system, campus or program level.

The Commission notes that a system called the Accountability Reporting for the Community Colleges (ARCC) does this type of tracking for community college graduates. But without comparable data for the other higher education sectors, policymakers are left without a comprehensive system.

A long established student follow-up system is the Florida Education and Training Placement Information Program⁴ (FETPIP). It tracks everyone who leaves an educational or training program in the state. Through agreements with other states, it can follow graduates into out-of-state jobs and into jobs with the government or the military. The results are aggregated by program, campus and system, and are readily available on the web.

In 1996, the California Legislature established the Performance Based Accountability (PBA) system, which was similar to FETPIP, to track individuals who exited public training and public higher education programs. This program, which operated for three years, tracked the labor market experience of trainees from eight public programs including community college vocational programs. The system was managed by the State Job Training Coordinating Council (which is now the State Workforce Investment Board). Data from the analyses were available on the web and in printed reports. While the UC and CSU were included in the law establishing PBA, they never participated in the system. The law establishing PBA remains on the books, but the State Workforce Investment Board has discontinued the system.

The Commission recommends that the Legislature amend the law to designate the California Postsecondary Education Commission as the operating entity for an automated follow-up system for public higher education and training, in which all public higher education institutions are required to participate. The Commission believes such a system is a good fit for its mission. The Commission would build on the PBA's experience to create a system that regularly assesses the labor market experiences of people who leave public higher education in California with or without a degree. These data will be used to evaluate the contribution of higher education to the state's workforce, provide feedback to systems, campuses and programs so they can improve their own performance, and provide valuable information to students and their families when choosing programs and campuses. The Commission believes that data systems operated by an independent third party have the advantage of being able to look across the entire educational spectrum and have good credibility with policymakers and the public.

References

1. The papers are summarized in a concluding paper Public Higher Education Performance Accountability Framework Report: Goal— Contributions to Economic, Civic, and Social Development Measure: How is California Education Doing? September 2007, CPEC.
2. Blanco, C.D., Jones, D.P., Longanecker, D.A. and Michelau, D.K. *Thinking Outside the Box: Policy Strategies for Readiness, Access and Success*. Western Interstate Commission for Higher Education, March 2007.
3. The most recent Commission paper was *Student Transfer in California Postsecondary Education*, June 2005, Commission Report 05-08
4. The Florida Department of Education website contains data on outcomes for Florida's college graduates and others at <http://www.fldoe.org/fetpip>.